

# WORLD CRANE AND TRANSPORT SUMMIT 2019

AMSTERDAM, NETHERLANDS  
13 AND 14 NOVEMBER

**ECOL project status and trainers' perspective:**

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ESTA Director

Mammoet Academy manager

CREATED AND ORGANISED BY

INTERNATIONAL  
**CRANES**  
AND SPECIALIZED TRANSPORT

AMERICAN CRANES & TRANSPORT  
**ACT**

**khl**



## ECOL Project Present status and recent developments

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# History of ECOL

Or: Why did ESTA bother to start this project ?

- Operator shortages in Northern Europe are coming & we noticed 'new' operator's skills were deteriorating.
- Directive EU2018/958 will allow all operators with a "government licence" from 30-07-2020 to execute their profession all over Europe.
- We wanted to raise the overall level of operator training in Europe and achieve EU wide recognition of crane operator qualification.
- Qualifications and experience of an operator should be verifiable





## Project structure – ECOL foundation

Supervisory Board – 3 members  
*(users – labor unions – manufacturers)*



**erasmus+**  
meer perspectief

*ESTA received funding  
under the Erasmus+  
adult education program  
for start up costs.*

**Since 1-1-2019 the ECOL foundation  
is independent from ESTA**



# ECOL Expert Committee

The Expert Committee controls the educational standard of ECOL

They appoint an examination and an Appeals committee

Committee members are appointed by co-optation

	Function	Name	Organisation
1		Fraser Cocks	BCACS - Canada
2	Examination Board Chairman	Kim Hvolbøl	DKF - Denmark
3		Erik Kroes	Mammoet – The Netherlands
4	Examination Board member	Pia Metsola	INFRA - Finland
5	Appeals board Chairman	Lion Verhagen	VVT - The Netherlands
6	Appeals board member	Giovanni Pauwels	VDAB - Belgium
7		Paul Zepf	VDMA - Germany
8	Appeals board member	Norbert van Schaik	Siemens-Gamesa
9	Examination board member	Kim Poulsen	EUC - Lillebælt





## ECOL standard and starting points

- ECOL Standard entails Examination and Training.
- Trainers and examiners to be certified.
- Examiners independent from Training institutes.
- ECOL standard to be registered under EQF
- No legal recognition, but MRA's with participating countries

→ *We expect participating countries wishing to join the ECOL standard will also recognise operators from other countries trained to the same ECOL standard.*





## Recent developments

- Vacant position in the Supervisory board – Mr Klaus Meissner appointed as new Board member.
- All documentation adapted to comply with the ISO 9001(2015) standard
- ECOL foundation received Iso 9001 certificate in August 2019
- Classification request under EQF has been sent last week, answer expected December 2019.
- Expected EQF class = 3



### CERTIFICATE

Aboma Certificering bv confirms that the Quality Management System of

STICHTING "ECOL"  
(EUROPEAN CRANE OPERATOR LICENCE)  
Lotte Beesestraat 4 at Leiden

Complies with the requirements of the Quality Management System  
**NEN-EN-ISO 9001:2015**

for the scope:

The development and maintenance of a system of training, certification and registration of crane operators at European level.

Code: EA39 – H.70.22

This certificate is valid from August 07, 2019 till August 07, 2022.

*Wouter Riel*

W.J.G. Riel bc

Manager Certificering

Certificatenummer: 1450195





## Educational standard – recent adaptations

Changes in the educational standard / lessons learned from Pilots

Training duration modified to allow for apprentice type practical in-company training

Learning outcomes edited to align with TCVT (NL)  
Recognition by TCVT is expected end of this month

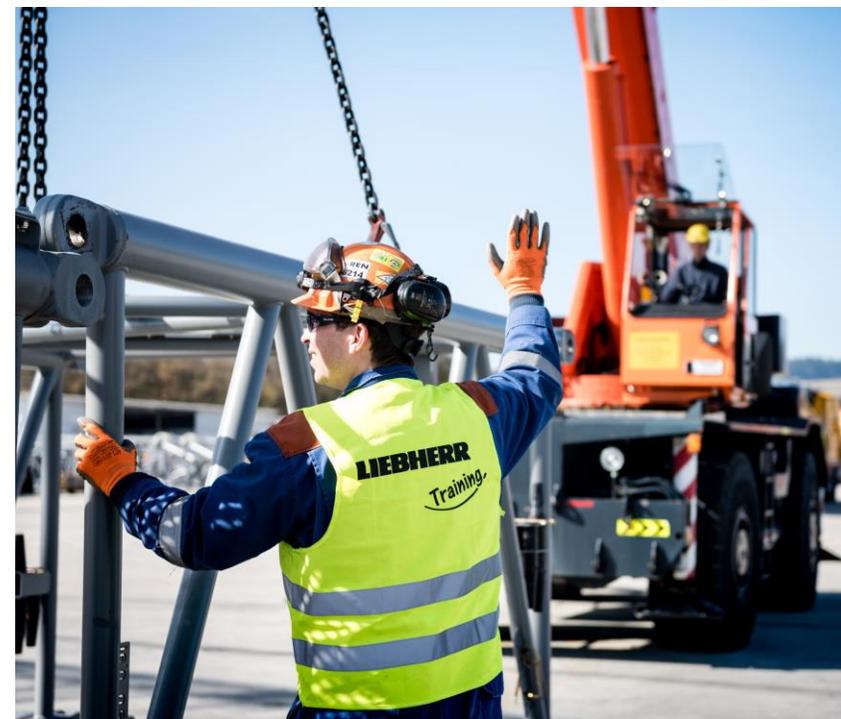
All contracts reworked to align with GDPR requirements





## Present status of Roll-out

- 2 education institutes and 3 examination institutes are certified
- 17 Operators have passed the ECOL examination
- 18 Teachers / Examiners have been certified by ECOL
- 6 more education institutes are in the process of qualifying under ECOL  
(Sarens – Comokra – Fagioli – Liebherr – TadanoDemag – Manitowoc)
- Mutual recognition in NL to be signed, Denmark and Belgium to follow suit.



## What's next ?

- **Generate support from high risk Industries (Wind – Petro-chemical).**
- **Raise awareness about the root cause of many crane accidents.**

and

- **Communication with National authorities.**





# 1. Educational standard

The educational standard consists of:

## Generic Training design:

Starting point for developing the training content.

## Learning Outcomes:

Document developed in 20 workgroup sessions describing the knowledge and skills a crane operator should have on examination.

## Glossary:

Overview of terms and component names in 15 different languages

*these documents can be obtained from ECOL*





## 1.1 Generic training design

### Training duration:

Regular program:  
240 hours

Apprentice program:  
280 hours

### Training content & delivery:

Specifies the equipment and materials needed, as well as the types of training (theory, practice, e-learning, simulators)

### Examination & validity:

Independent exam

Licence valid for 5 years

Renewal through experience





## 1.2 Learning Outcomes

A summary of everything a crane operator should know, what he should be able to do and how he should behave in certain situations.

### Learning outcomes:

Describing the goals of the training and examination.

### Training content examples:

Gives guidance to course developers and training institutes.  
Basis for the examination protocol.

### Based on the “Occupational Standard Mobile Crane Operator”

ECOL 01/07 vs 3



# 1.3 Glossary

One common language is needed to communicate with ECOL. We decided on English. In order to avoid confusion we produced a Glossary of Crane related terms, now available in 15 languages.

Category	ECOL - Glossary	Type	Approved meaning / ALTERNATIVE	Approved example	Image	Translations
other	ADDITIONAL	adjective	More than usual.	A jib is an additional lattice boom section.		EXTRA
lifting gear / loads	A-FRAME	noun	A frame that supports the the winch for the boom derrick rope.	The a-frame is an important crane component for the movement of the backmast.	crawler crane components.pdf	A-FRAME
lifting gear / loads	AIR DRYER	noun	A device that removes water vapour from compressed air.	An air dryer protects the pneumatic system components from corrosion.	air dryer.png	LUCHTDROGER
lifting gear / loads	AIR RECVEIVER	noun	A container for compressed air in a pneumatic system.	Make sure to drain moisture from the air receiver every now and then.		LUCHTKETEL
other	ALL WHEEL STEERING	noun	To steer the wheels of a crane in opposite directions to create a small turning circle.	We have to use all wheel steering to go around this small corner.		CARROUSELBESTURING
cranes	ALL-TERRAIN CRANE	noun	A crane that combines the features of the truck crane and the rough-terrain crane.	An all-terrain crane is to be used to lift that load.	all-terrain crane.mm.jpg	RUIJ TERREIN KRAAN
cranes	anemometer	noun	WIND SPEED INDICATOR			
cranes	anti two-block switch	noun	HOIST LIMIT SWITCH			
lifting gear / loads	ANTI-SPIN CABLE	noun	A type of cable that resists rotation when a force is applied on the cable.	Use an anti-spin cable to prevent the load from spinning.	anti-spin cable.png	DRAAIVRUE KABEL
lifting gear / loads	APPLICATION POINT	noun	The point were a force applies to an object.	The application point of a loads weight is its center of gravity.		AANGRUPINGSPUNT
cranes	AUXILIARY CRANE	noun	A crane that helps with the assembly of another crane.	The auxiliary crane lifts the mast section in place.		HULPKRAAN
cranes	AXLE	noun	Shaft on which wheels are installed.	Each axle line of this crane has two axes.	axle.jpg	ASSEN
cranes	AXLE LINE	noun	All axes of a trailer that are next to each other in sideways direction.	This crane has three axle lines.		ASLIJN

*ECOL training and examination can be in the national language or in English*





## 2. Operator certification in practice

An existing diploma is validated

Or

Novice operator passes ECOL exam

Crane operator receives ECOL licence

+

Licence will be included in the ECOL register

Follow-up process:

Register experience in SkillRecord

+

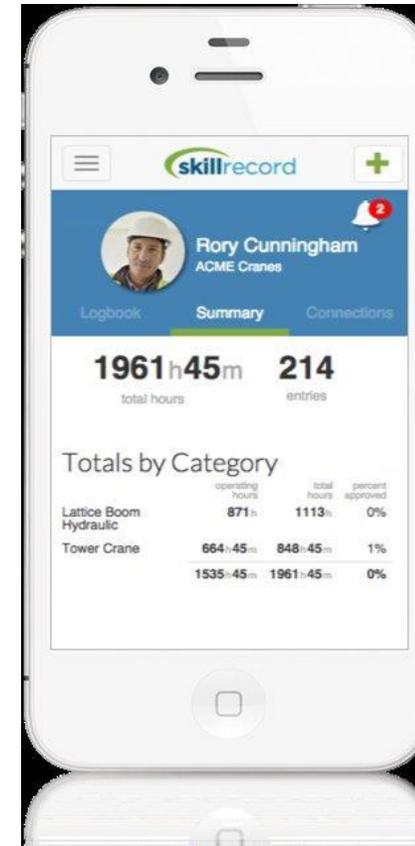
Two refresher trainings every five years



## 2.1 Experience registration

### Operator registration under the ECOL system:

- Online application [www.skillrecord.com](http://www.skillrecord.com)
- Experience and operating hours logged (mandatory number of hours/year)
- Pictures / comments can be added
- Validated by employer
- Logging required for recertification



## 3. Quality control

What is to be expected as a participant (trainer / examiner)?

1. **A third party audit before accreditation**  
( *Lloyds – evaluation on a yearly basis* )
2. **An unannounced visit by ECOL during a training session (5%)**  
( *can be an auditor or ECOL representative* )
3. **An unannounced visit during an examination (5%)**  
( *can be an auditor or ECOL representative* )
4. **A “one strike, you’re out” policy against fraudulent actions**



## 4. Pilot runs – planning and participants

Pilot runs have been executed from early 2018 onwards

- Mammoet Academy - The Netherlands (March 2018), 4 operators
- EUC Lillebælt – Denmark (September 2018), 5 operators
- Fagioli Training Centre - Italy (date to be determined)

Follow-up sessions means we now have 18 people who have passed the exam and are eligible for a licence.

NOTE: independent examination is difficult to achieve in many countries.





[www.ecol-esta.eu](http://www.ecol-esta.eu)

European Crane Operators Licence





## 5. Licence



Validity is confirmed by checking licence number against the register on the ECOL website

[www.ecol-esta.eu](http://www.ecol-esta.eu)





[www.ecol-esta.eu](http://www.ecol-esta.eu)

European Crane Operators Licence

## 9. Questions ?

